Exploration of Talent Training Models in Higher Vocational Colleges from the Perspective of Integration of Industry and Education: Taking the "Three Elements and Five Parts" Model as an Example

Jiangting Liu, Hongzhu Long

Chongqing City Vocational College, Chongqing, 402160, China

Abstract: From the perspective of stakeholders, this article takes a typical case of school enterprise cooperation in the integration of industry and education as an example to explore the innovative construction of characteristic talent cultivation models in vocational colleges. By organically integrating industry and education with the government, schools, and enterprises, this article maximizes its effectiveness and proposes more practical optimization suggestions from multiple aspects such as enrollment, teaching, competitions, 1+X certificates, and employment, providing new ideas for improving the quality of talent cultivation.

Keywords: Integration of Industry and Education; Vocational Colleges; Talent Cultivation; Three Element Five Ring Pattern

1. The connotation and characteristics of the "three elements and five parts" model

1.1 Connotation

The "Three Elements and Five Parts" model is a talent cultivation model in vocational colleges, mainly consisting of three main bodies and five links. Among them, the three main entities are: the relevant stakeholders for the cultivation of integrated talents in industry and education, namely the government, enterprises, and schools; The five links are: enrollment, teaching, competition, 1+X certificates, and employment[1].

Specifically, the "three element" model refers to fully leveraging the government's macro regulatory role, forming a collaborative education model with local government guidance, deep participation of enterprises and schools, and mutual complementarity and coordination. The government encourages and guides enterprises and schools to actively participate in industry education integration and school enterprise cooperation through preferential policies, systems and regulations[2]. Enterprises actively seek school cooperation, talent resources, and technology. The school selects high-quality enterprises for school enterprise cooperation based on professional characteristics and development plans.

The five links specifically refer to the joint efforts of the government, enterprises, and schools to innovate the training mode in the five major links of talent cultivation. Ensure the alignment of talent cultivation goals with industry and enterprise needs in the enrollment process, the alignment of curriculum system with job tasks in the teaching process, the integration of professional skills and job skills through competitions and 1+X certificates, the alignment of employment ability and vocational skills in the employment process, and the cultivation of high-quality composite technical and skilled talents, achieving the win-win goal of urban development, enterprise talent acquisition, and strong school strength[3].

In short, the "Three Elements and Five Parts" model is based on the integration of industry and education, with the goal of cultivating applied talents with practical ability, innovative thinking, and social responsibility. Through various practical activities and diversified teaching methods, it comprehensively improves the comprehensive quality and employment ability of vocational college students[4].
1.2 Characteristics

1.2.1 Integration and improvement of industry and education

The "Three Elements and Five Parts" model establishes a cooperation mechanism for the integration of industry and education, establishes close connections with enterprises, and jointly promotes industrial development and talent cultivation. Vocational colleges can collaborate with enterprises to carry out curriculum design, practical teaching, research projects, and other aspects, enhance cooperation and interaction between the two parties, and improve students' practical and innovative abilities.

1.2.2 Focus on practical education

The "Three Elements and Five Parts" model emphasizes the cultivation of practical abilities, deeply integrating course content and form with enterprises, carrying out teaching activities that integrate industry, academia, and research, strengthening practical teaching, allowing students to learn and master relevant skills and knowledge in practice, and improving practical and innovative abilities. Through the setting of practical links, students can master practical operational skills, understand the actual situation of the industry, and increase employment competitiveness in practice[5].

1.2.3 Highlighting professional qualities

The "Three Elements and Five Parts" model focuses on carrying out vocational literacy education and employment guidance, improving students' vocational literacy and employment competitiveness. Professional literacy refers to the qualities of morality, ability, knowledge, and skills that students need in their career development. Vocational colleges cultivate students' professional ethics, abilities, and spirit through the development of professional literacy education, and improve their comprehensive quality.

1.2.4 Integration of innovation and entrepreneurship

The "Three Elements and Five Parts" model helps to actively promote innovation and entrepreneurship education, cultivate students' innovation awareness and entrepreneurial spirit, and improve their innovation and entrepreneurial abilities[6]. Vocational colleges can provide entrepreneurship training and support through innovation and entrepreneurship education bases, helping students better master entrepreneurial skills and experience, and providing platforms and support for students' entrepreneurship.

1.2.5 Optimization of teaching staff

The "Three Elements and Five Parts" model focuses on introducing teachers with industry background and practical experience, strengthening communication and cooperation between teachers and enterprises, and improving teachers' teaching and guidance abilities. Vocational colleges can continuously improve teachers' practical abilities and teaching levels by introducing industry professionals and establishing an integrated teaching team for industry, academia, and research.

2. The advantages of the "three elements and five Parts" model in higher vocational colleges from the perspective of integration of industry and education

2.1 Realizing the integration of courses with market demand

As a highly applicable education system, vocational colleges need to match their teaching content with market demand to ensure that the students they cultivate can quickly adapt to the needs of industry development. As the main body of the market, enterprises have actual demand and practical experience, which can be fed back to vocational colleges to guide the education system to better align with market demand[7]. In the "Three Elements and Five Parts" model, the industry provides feedback on students' relevant professional knowledge. Here, students can establish professional skills based on practice, inject practical elements into talent cultivation, help vocational colleges better adjust teaching content and methods, and improve teaching quality.

2.2 Improving students' practical abilities and employment competitiveness

The "Three Elements and Five Parts" model in vocational colleges should not only emphasize practical teaching, but also focus on the comprehensive improvement of enrollment quality, teaching
quality, competition level, obtaining 1+X certificates, and graduation employment. In terms of enrollment, it is necessary to strengthen the admission assessment system that prioritizes morality to ensure high-quality students; in terms of teaching, it is necessary to continuously improve the curriculum and teaching quality, strengthen practical training and enhance comprehensive quality; in terms of competitions, it is necessary to actively organize and participate in various skill competitions and professional competitions to enhance students' practical ability and professional level; in terms of obtaining 1+X certificates, it is necessary to actively carry out relevant certificate certification work to help students improve their overall quality; in terms of graduation and employment, it is necessary to actively carry out employment guidance and entrepreneurship training to help students better adapt to social job seeking and entrepreneurial needs, and improve their employment competitiveness. With the "Three Elements and Five Parts" model, vocational colleges can comprehensively improve students' practical abilities and employment competitiveness, and cultivate more high-end talents with practical experience and innovative awareness.

2.3 Promoting industry university research cooperation and promoting technological innovation

In the "Three Elements and Five Parts" model of vocational colleges, the cooperation between the industry and vocational colleges is relatively deep and inseparable. One of the important goals of this model is to promote the establishment and improvement of the cooperation mechanism between industry, academia, and research, and accelerate the transformation of scientific and technological innovation achievements. In this process, vocational colleges are both educational institutions and research institutions, which can possess information and professional technical capabilities in the forefront of industry and technology applications. Enterprises can provide practical venues to introduce market demand to vocational colleges and assist them in carrying out scientific research tasks. Vocational colleges and enterprises work together to integrate and transform existing knowledge and technology, accelerating the application of related achievements. Vocational colleges can also utilize scientific research achievements and industrial cooperation, while strengthening the construction of teaching staff, and cultivating more teachers and students who can conduct scientific research innovation and technology transformation in the industry. These latest technologies, equipment, and concepts with scientific research will inject new vitality into the development of enterprises.

2.4 Optimize talent structure to meet market demand

The "Three Elements and Five Parts" model in vocational colleges is very important for the job market, as it can cultivate practical talents with practical abilities and high-level comprehensive qualities, and provide professional technical support and services for enterprises. In the "Three Elements and Five Parts" model, there are many practical operations that students need to go through when completing various tasks. This enables them to have the ability to apply their knowledge to solve practical problems after graduation, and to quickly adapt to the market environment and industry characteristics. In addition, the "Three Elements and Five Parts" model can also cultivate students' innovative thinking and practical abilities, and improve their market adaptability by helping them better integrate into market demand. In the fiercely competitive job market, these vocational college graduates with practical experience and comprehensive qualities have more advantages and competitiveness.

2.5 Enhancing the level of regional economic development

From a regional perspective, the "Three Elements and Five Parts" model helps to promote industrial upgrading and optimize the regional human resource structure. Through in-depth cooperation between vocational colleges and enterprises, vocational education is closely linked to the region where the enterprise is located, promoting industrial development and regional economic growth. In addition, during the implementation of the "Three Elements and Five Parts" model in vocational colleges, students will also carry out social service activities to contribute to local communities and public welfare undertakings. This positive sense of social responsibility and practical awareness also helps to improve the local social atmosphere and guide enterprises and relevant departments to actively participate in social construction and public welfare work.
3. Suggestions on the application of the "three elements and five parts" model in talent training in vocational colleges from the perspective of integration of industry and education

3.1 Enrollment process

In the recruitment process, the government, enterprises, and schools can work together to ensure a close alignment between talent cultivation goals and the needs of industry enterprises. This cooperative relationship is of great significance for talent cultivation in vocational colleges, as it can effectively improve students' practical abilities and employment competitiveness.

Government departments can work closely with enterprises to enhance their understanding of industry development trends and employment needs. The government can keep up with the latest developments in the industry, understand the technological development in various fields, and understand the demand situation in the job market through communication and cooperation with enterprises. Based on this information, the government can formulate targeted enrollment policies to guide students to choose majors that meet industry needs.

Schools should actively establish cooperative relationships with enterprises and carry out joint enrollment activities between schools and enterprises. Schools can sign cooperation agreements with relevant enterprises to jointly develop talent training plans and clarify training objectives and requirements. By conducting joint enrollment activities between schools and enterprises, the school can directly connect with industry needs, ensuring that students choose the appropriate professional direction during the enrollment stage, and cultivating talents that meet industry requirements.

Through cooperation between the government, enterprises, and schools, students can be ensured to align with industry needs during the enrollment stage, laying a solid foundation for subsequent learning and practice. This closely connected approach can enable students to pay more attention to the cultivation of practical abilities during the learning process, be closer to the needs of the industry, and improve their competitiveness in the job market.

3.2 Teaching process

Vocational education not only provides high-quality technical talents for society, but also faces increasingly fierce competition in the job market. Vocational students must have the comprehensive development of practical ability and professional literacy to meet the challenges of the job market. Therefore, the government, enterprises, and schools need to strengthen the integration of curriculum and work tasks, and establish a curriculum system that is in line with industry enterprises.

The government needs to actively play a supportive role, increase support for the education and teaching reform of vocational colleges, and guide schools and enterprises to cooperate in the construction of professional courses. The government can establish relevant ruling bodies, formulate more incentive measures, and encourage schools to cooperate with industry enterprises to carry out skill training programs. The government can also provide financial support for schools, increase practical links and courses, and promote the continuous improvement of the school curriculum system.

Enterprises can provide practical positions and tasks, provide students with practical experience and opportunities, and deepen their theoretical application in practice. Enterprises can provide students with more practical opportunities by collaborating with vocational colleges to establish training bases and develop training plans, thereby enabling them to better understand professional knowledge and practical applications in practice and enhance their employment competitiveness.

Schools can develop a curriculum system that aligns with job tasks to enhance students' application and practical abilities. Schools can collaborate with enterprises to establish training bases and develop training plans to encourage students to better acquire practical skills and help them apply the knowledge and skills they have learned to practical problems. At the same time, schools can also strengthen the construction of teaching staff, cultivate more teacher skills, and further improve the quality of courses.

3.3 Competition Session

Competition is an activity that can stimulate students' learning enthusiasm and improve their practical abilities. Through competition activities, students can exercise their team collaboration ability, innovative thinking ability, and practical ability, and improve their competitiveness and professional
literacy. Governments, enterprises, and schools can strengthen their support for competitions in various ways, providing students with better development opportunities and practical platforms.

On the government's side, support for innovation, entrepreneurship, and skill competitions among vocational college students can be strengthened, and students can be encouraged to actively participate in various competition activities. The government can establish and improve competition guidance and evaluation mechanisms in vocational colleges to enhance the fairness and professionalism of competitions. In addition, the government can also strengthen the research and promotion of competition projects, increase the quantity and quality of competition projects, and attract more students to participate in competition activities.

In terms of enterprises, competition venues and opportunities can be provided to encourage students to participate in internal competition activities. Enterprises can establish stable cooperative relationships with vocational colleges, provide practical positions and tasks, and provide students with practical experience and opportunities. Enterprises can also collaborate with vocational colleges to carry out innovation and entrepreneurship projects, provide entrepreneurship platforms and financial support for students, and cultivate their innovation ability and entrepreneurial spirit.

In terms of schools, the organization and guidance of student competition activities can be strengthened to improve students' practical and innovative abilities. Schools can create competition organizations that are responsible for organizing and guiding students to participate in various competition activities, and providing necessary technical support and resource guarantee for students. In addition, schools can also strengthen competition training for students, improve their competition skills and experience, and make sufficient preparations for students to participate in competition activities.

3.4 1+X certificate

In order to better leverage the role of the 1+X certificate, the government, enterprises, and schools can work together to provide support and opportunities to improve students' skill levels and employment competitiveness.

Firstly, the government can increase its support for 1+X certificates. Government departments can formulate relevant policies to encourage vocational college students to actively participate in the 1+X certificate exams related to their majors. The government can provide incentives and funding to reduce the cost of certificate exams and encourage students to actively participate. At the same time, the government can also strengthen cooperation with certificate examination institutions, promote the development and promotion of certificate examinations, and ensure the authority and credibility of certificates.

Secondly, enterprises play an important role in the training and practice of 1+X certificates. Enterprises can provide training opportunities for vocational college students to take relevant certificate exams, and organize professional personnel for guidance and guidance. Through cooperation with enterprises, students can be exposed to practical work scenarios and projects, and better master professional and vocational skills. Enterprises can also provide practical internship opportunities, allowing students to apply their knowledge to practical work, cultivate practical skills and problem-solving abilities.

In addition, schools should also strengthen guidance and guidance for students with 1+X certificates. Schools can set up specialized certificate tutoring classes or courses to help students understand the requirements and content of certificate exams, and provide corresponding training and guidance. Schools can invite industry experts for lectures and training, provide practical cases and skills sharing, and help students better prepare for and pass certificate exams. In addition, schools can collaborate with enterprises to carry out practical projects and experimental training, allowing students to combine their knowledge with practical work and improve their professional and practical abilities.

3.5 Employment process

In the current employment environment, graduates of higher vocational colleges are facing increasing employment pressure. The government, enterprises and schools need to work together to ensure the connection between employability and vocational skills and help students achieve smooth employment and career development.
The government can strengthen support for the employment of vocational college students, through relevant policy guidance and career guidance, help students understand market demand, master employment skills and skills, and also provide professional career evaluation, matching and other services for students. The government can also increase subsidies for the employment of vocational college graduates, incentivizing enterprises to provide more job opportunities.

Enterprises can provide employment positions and vocational training, providing students with employment opportunities and career development space. Enterprises can cooperate with vocational colleges, establish internship bases, carry out school enterprise cooperation projects, and other forms to provide practical opportunities and vocational training for students, promoting their employability and vocational skills improvement. In addition, enterprises need to actively participate in industry recruitment activities, timely understand market talent demand, and provide more job opportunities for students.

Schools can strengthen the cultivation of students' employability and vocational skills, and improve their professional literacy and abilities. Schools can provide students with more accurate career guidance and practical opportunities by developing a curriculum system that adapts to market demand, strengthening practical links and vocational skills training. In addition, schools can also strengthen cooperation between schools and enterprises, increase employment resources and channels, help students better integrate into society, and achieve career development.

4. Conclusion

In summary, the talent cultivation model of industry education integration in vocational colleges needs to be continuously explored and improved. In practice, vocational colleges need to focus on market demand and industry development trends, continuously adjust their professional settings and curriculum design, and cultivate high-quality talents that meet the needs of enterprises. At the same time, vocational colleges need to strengthen cooperation with enterprises and the government, improve policy support and financial guarantee, and promote the in-depth development of the talent cultivation model of industry education integration.

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References